fall, but the specific name may be used for the Mzab Eliomys, of which for the present the Tunisian and Eastern Algerian form may be looked upon as a subspecies. It may, however, prove to grade into the still earlier described E. munbyanus, Pomel, of Morocco and Western Algeria (typical locality Oran), of which both levotinus and tunetæ in that case would have to rank as subspecies.

### LXXII.—On the Species of the Genus Rhinopoma. By Oldfield Thomas.

The Egyptian Pyramids are inhabited by large numbers of bats of the genus *Rhinopoma*, the mouse-tailed bat, first recorded by Belon as long ago as 1554. By Dobson, in his Catalogue, the members of this genus, whether from Egypt or India, were all combined under one heading, *R. microphyllum*, "Geoffroy," although both Peters and Heuglin had pointed out that in Egypt two forms were present, a larger and a smaller, the former having the tail shorter than the

forearm, the latter longer \*.

But in giving new names the two German authors, misled by their belief that Geoffroy's measurements were the original ones, affixed the names to the larger form. Now, however, that Anderson and de Winton's work † has drawn attention to the fact that it was Brünnich, and not Geoffroy, who first described the species, I am able to state, on measurements kindly furnished me by Dr. Winge, that the type, still preserved in the Copenhagen Museum, is the large form with short tail (forearm 67.5 millim, tail 61). The smaller one, as to whose distinction from the larger no one who had compared the skulls could doubt for one moment, will therefore require a new name, and may be called

### Rhinopoma cystops, sp. n.

Size comparatively small (forearm averaging about 52 millim., and rarely attaining 55). Nose-leaf more developed than in *R. microphyllum*. Ears proportionally large, the frontal band joining them particularly high. Tail very long and slender, longer than the forearm.

\* Rhinopoma lepsianum, Peters, MB. Ak. Berl. 1859, p. 222 (Blue Nile).

Rhinopoma cordofanicum, Heugl. Reise N.O.-Afr. ii. p. 24 (1877). Fitzinger also applied two names—R. senaurense and longicaudatum—to members of this genus, but gave no descriptions.

† Manni. Egypt. pp. 143 & 147 (1902).

Skull small, narrow and delicate (greatest length 16-17 millim., as compared with 19-20 in R. microphyllum); muzzle with two inflated projections, one on each side of and above the nasal opening, with a longitudinal groove between them. In R. microphyllum this region is almost flat, and its angles, although thickened, are not conspicuously inflated. Sagittal crest but little developed, not connected anteriorly with the nasal projections.

Dimensions of the type (an adult female, measured in

spirit before skinning) :-

Forearm 53 millim.

Head and body 53; tail 59; hind foot (s. u.) 11.5; ear 17. Skull: greatest length 16.7; basal length 14; occipitonasal length 14.5; zygomatic breadth 10; breadth of brain-

case 7.2; front of canine to back of  $m^3$  5.6.

Hab. (of type). Luxor, Lower Egypt. Other specimens from many Egyptian localities, southwards to Gebel Auli, Soudan (H. F. Witherby). Examples from Palestine (Tristram), Midian (Burton), and Aden (Percival & Dodson) are also assignable to R. cystops.

Type. Adult female. B.M. no. 2. 1. 17. 2. Collected

and presented by the Hon. N. Charles Rothschild.

Not only, however, are these two Egyptian species distinct from each other, but the members of the genus elsewhere appear to fall into two groups corresponding to them both in external proportions and in the characters of the skull.

To the first or microphyllum group, besides the type species, whose range extends from Egypt and Palestine (Tristram) to Persia (Witherby), there belongs the large form described

below as R. sumatræ.

To the second, besides cystops itself, the species recognizable are Hardwickei from India and muscatellum from Muscat.

Apart from the differences in size and length of tail that separate the two groups, the species are very like each other externally; but the skull-characters are in all cases most obvious, and leave no room for doubt as to the distinctness of the various forms.

# Rhinopoma sumatræ, sp. n.

A large species allied to R. microphyllum.

Size very large, the largest of the genus. General colour dull brown, little lighter below. Nose-leaf and ears short, the connecting band between the latter comparatively low. Tail shorter than forearm.

Skull large and heavy, considerably larger than those of 35 Ann. & Mag. N. Hist. Ser. 7. Vol. xi.

R. microphyllum and Hardwickei. Sides of top of muzzle thickened and rounded, but not inflated. Sagittal crest very high in the frontal region.

Dimensions of the type (measured in spirit):— Forearm 72 millim. (in another specimen 70).

Head and body 73; tail 65; ear 20; connecting band, height behind in centre 3; third finger, metacarpus 52, 1st phalanx 10, 2nd phalanx 19; fifth finger, metacarpus 47, 1st phalanx 10, 2nd phalanx 10; lower leg and hind foot (s. u.) 40.5.

Skull: greatest length 21.2; basal length 18.2; occipitonasal length 18.6; zygomatic breadth 12.8; breadth of brain-

case 9.2; front of canine to back of m3 8.

Hab. Balighe, Lake Toba, N.W. Sumatra.

Type. Old male. B.M. no. 0.8.2.17. Collected by Dr. E. Modigliani, and presented by the Museo Civico, Genoa.

This is the largest species of the genus, and differs from the Indian R. Hardwickei not only in size but in the noninflation of its nasal prominences.

## Rhinopoma muscatellum, sp. n.

Allied to R. cystops, but rather smaller, with larger bulls and smaller teeth.

Size rather less than in *R. cystops*, therefore the smallest member of the genus. Ears large, thin, with a high connecting band. External characters generally as in *cystops*.

Skull small, slender, and delicate, almost or quite without sagittal crest. Its anterior portion narrower than in cystops and more parallel-sided, so that the outline as seen from above runs backwards and then abruptly turns outwards at the zygomata; in cystops and other species the general outline diverges evenly to the broadest point of the zygomata. Nasal prominences large, thin, inflated, projecting forward decidedly in front of the anterior end of the middle line of the nasals. Supraorbital edges scarcely ridged. Brain-case small, low, its walls unusually thin and translucent. Hinder edge of the palate distinctly behind the level of the last molar. Bullæ conspicuously larger than in the allied forms. Teeth very small, both above and below, the lower molars noticeably less high-crowned than usual; lower incisors thin and barely touching one another instead of being pressed closely together; anterior lower premolar barely half the height of the posterior.

Dimensions of the type (measured on a spirit-specimen):—

Forearm 49 millim.

Head and body 53; tail 60; ear 17.5; third finger, metacarpal 33, first phalanx 7.2, second phalanx 14.7; fifth finger, metacarpal 30, first phalanx 8, second phalanx 7.2; lower leg and hind foot (s. u.) 32.

Skull: greatest length 16; basal length 14; occipito-nasal length 14.2; zygomatic breadth 9.5; breadth of brain-case

6.7; front of canine to back of m3 5.3.

Hab. Muscat. Type from Wadi Bani Ruha.

Type. Old male. B.M. no. 94.3.9.17. Collected and presented by Dr. A. S. G. Jayakar. Eight specimens

examined.

This species is readily distinguishable from all others by its delicately built, nearly unridged skull, its small teeth, and large bullæ.

LXXIII.—New Species of Eastern and African Lepidoptera. By Colonel C. SWINHOE, M.A., F.L.S., &c.

> Family Nymphalidæ. Subfamily EUPLŒINÆ. Crastia circuita, nov.

3. Rufescent brown, the borders paler; a small round subcostal spot beyond the middle on the fore wings, one a little above the origin of vein 3, another evanescent in the interspace below; the marginal and submarginal white spots above and below as in E. Distanti, Moore, from Sumatra, but the spots are rounder and more uniform in size, the subapical spots of fore wings less than one third the size.

Expanse of wings 3,7 inches.

Tonkin (Fruhstorfer).

## Crastia tonkinensis, nov.

3. Paler than the above and more rufescent, the apical border nearly as pale as some specimens of C. Godarti, Lucas; spots disposed of as in the above, but much smaller; no spot in the first interspace of fore wings, the next three mere dots; the last spot of the submarginal series next to the subcostal dot altogether absent, and the spots on the hind wings evanescent.

Expanse of wings 3 10 inches.

Tonkin (Fruhstorfer).

This species is nearest to C. Binghami, Moore, from Burma.

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